Complete Listing of the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

Claims 1 - 48 (cancelled).

49. (New) A method for recovering one or more desired circular target nucleic acid molecules, said method comprising:

(A) obtaining a sample comprising one or more single-stranded desired circular target nucleic acid molecules;

(B) incubating said sample in the presence of one or more haptenylated nucleic acid probe molecules under conditions sufficient to permit one or more of said probe molecules to hybridize to one or more of said desired circular target nucleic acid molecules, thereby forming one or more hybridized probe-target molecules;

(C) capturing one or more of said hybridized probe-target molecules in the presence of one or more binding ligands which are capable of binding to the hapten of said one or more haptenylated nucleic acid probe molecules, wherein one or more of said binding ligands are conjugated to a support, thereby forming one or more captured hybridized probe-target molecules;

(D) incubating one or more of said captured hybridized probe-target molecules under conditions sufficient to permit release of one or more of said

haptenylated nucleic acid probe molecules from one or more of said desired circular target nucleic acid molecules; and

(E) treating said desired circular target nucleic acid molecules obtained in (D) under conditions sufficient to make one or more of said desired circular target nucleic acid molecules double-stranded.

50. (New) The method of claim 49, further comprising transforming a host cell with one or more of said double-stranded desired circular target nucleic acid molecules obtained in (E).

51. (New) The method of claim 49, wherein said incubation in (B) is under conditions which minimize random hybridization.

52. (New) The method of claim 49, wherein one or more of said desired circular target nucleic acid molecules are DNA molecules.

53. (New) The method of claim 49, wherein said sample comprises a mixture or library of DNA molecules.

54. (New) The method of claim 49, wherein one or more of said desired circular target nucleic acid molecules are selected from the group consisting of plasmids, cosmids and phagemids.

55. (New) The method of claim 49, wherein one or more of said desired circular target nucleic acid molecules are plasmids.

56. (New) The method of claim 49, wherein one or more of said desired circular target nucleic acid molecules are cosmids.

57. (New) The method of claim 49, wherein one or more of said desired circular target nucleic acid molecules are phagemids.

58. (New) The method of claim 49, wherein one or more of said desired circular target nucleic acid molecules are double-stranded DNA molecules.

59. (New) The method of claim 49, wherein said hapten is biotin.

60. (New) The method of claim 59, wherein said biotin is covalently bonded to the 3' terminus of said one or more haptenylated nucleic acid probe molecules.

61. (New) The method of claim 49, wherein said one or more binding ligands are selected from the group consisting of avidin, streptavidin, antibodies that bind biotin and antibody fragments that bind biotin.

62. (New) The method of claim 49, wherein said one or more binding ligands are avidin.

63. (New) The method of claim 49, wherein said one or more binding ligands are streptavidin.

64. (New) The method of claim 49, wherein said one or more binding ligands are antibodies that bind biotin.

65. (New) The method of claim 49, wherein said one or more binding ligands are antibody fragments that bind biotin.

66. (New) The method of claim 49, wherein said support is a paramagnetic bead.

67. (New) The method of claim 49, wherein one or more of said haptenylated nucleic acid probe molecules has a degenerate sequence.